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A NEW SPECIES OF *COLOBOPSIS* (HYM., FORMICIDAE) FROM NEW GUINEA WITH A FEW NOTES ON THE SUBGENUS

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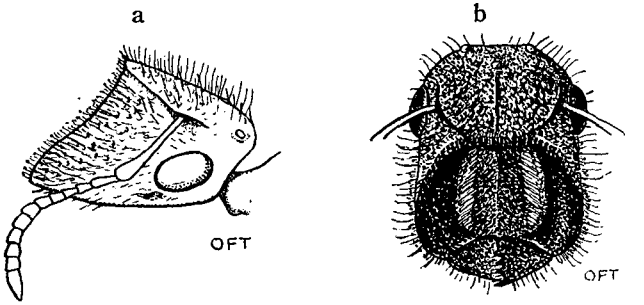
Camponotus (Colobopsis) excavatus sp.n.

♀. Head and thorax reddish yellow, head darker, gaster and limbs yellow.

Head cylindrical, truncate in front, shortest from anterior border to back of head, longest from tip of mandibles to foramen, posterior angles rounded, posterior border straight. The truncate part of the head is enclosed by a sharp rim which is continued along the upper border of the closed mandibles; a longitudinal carina runs down the centre of the enclosure, which is deeply excavated at sides. On each side of the carina, at a short distance from it, is a row of pale golden clavate hairs, placed close together; and closer to the carinae and in the excavations at sides are much shorter scattered clavate hairs. The rim of the truncation of the head is clothed with a fringe of short clavate hairs. The hairs on the cheeeks and back of the head are longer and blunt but not clavate. A very fine longitudinal carina extends from the centre of the anterior border of rim to the median ocellus. The sculpture of the head at the sides consists of fine longitudinal striae, and on top with a cross striation forming a network enclosing shallow punctures; the spaces between the longitudinal striae are very finely longitudinally striate; *mandibles* massive, triangular, sharply toothed at apex, concave on inner surface, convex on outer, masticatory borders evenly meeting when closed, armed with some four blunt teeth; *clypeus* longer than broad, narrow, extending from base of mandibles to top of rim of truncation, the above-mentioned carina extends along it, and the rows of pale golden hairs fringe its sides; *frontal carinae* flat, sharp, divergent, extending beyond centre of eyes; *eyes* large, round oval, convex, situated on temples, near posterior border of head; *ocelli* moderate, rather wide apart, the two posterior pair situated on occiput of head; *antennae* 12-jointed, situated behind the middle of the frontal carinae, *scape* extending beyond posterior border of pronotum, first joint of *funiculus* longer than the second and third taken together, last joint as long as the two preceding taken together. *Thorax* smooth and shining, rather narrow, oval, convex, longer than broad, broadest at insertion of fore-wings; *pronotum* large, transverse, widely overlapping the mesonotum, anterior border margined; *mesonotum* broad oval, posterior border straight; *praescutellum* narrow, transverse, not very convex; *metanotum* narrow, transverse, convex; *epinotum* convex, angle between dorsal surface and declivity not marked. *Petiole* with a rather small node, not high, smooth and shining, broadest on upper surface, side angles rounded; *gaster* long oval, rather narrow, smooth and shining, pointed at apex. *Legs* moderate. *Wings* typical *Camponotus*, pale yellow, *pterostigma* and *veins* pale brownish yellow, one long *cubital* and closed *radial cell* present, *cubitus* and *radius* soldered together. *Long.* 8 mm.



Camponotus (*Colobopsis*) *excavatus* sp.n.
a, Side view of head; b, front view of head.

Described from two winged females. Maffin Bay, Dutch New Guinea, August, 1944, E. S. Ross Coll.

Mayr described *Colobopsis* in 1861 (*Europ. Form.*: 38) to include two species, *truncata* Spin. and *fuscipes* Mayr; the latter, however, is only the worker of *truncata*. *Colobopsis* is now considered to be a subgenus of *Camponotus* Mayr, in the subfamily Formicinae, tribe Camponotini. The type *Formica truncata* Spinola (1808, *Insect. Ligur. Spec. Nov.*, **2**: 244) was cited by Bingham in 1903 (*Faun. Brit. India*, Hym., **2**: 342).

The distribution of *Colobopsis* includes India, Malaysia, Oceania, Aus-

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tralia, Japan, one European species, the Southern States of America, Mexico and Cuba.

It was suggested that the above-described insect should be placed in a new genus. I, however, do not agree with this, for at a glance it is obviously a *Colobopsis*. I would sooner remove some of the other groups, the species of which are considered to be *Colobopsis,* in which the head of the soldier and queen is slanting and not truncate. Emery (1925, *Gen. Ins.,* fasc. 183: 145) divides *Colobopsis* into six groups, and *excavatus* belongs to the *truncatus* or typical group.

I have taken *C. truncatus* nesting in walnut twigs in Switzerland.

The members of the subgenus live in wood, dead branches of trees, stems, galls, etc., in which they excavate galleries. The soldiers and queens act as living front doors to the entrance to the nest, for the emergence hole has the exact dimensions of the diameter of the truncature of their heads. A soldier or queen guards the entrance by closing it with her head. When a homing ant wants to enter, the doorkeeper withdraws to a small chamber beneath, and, when the ant has entered, promptly plugs the gap again with her head. The aperture then becomes invisible.

The present described species would not appear to be so well adapted for this purpose, as the head is excavated and not flat as in others of the group, and the rows of hairs to the clypeus, etc., would appear to make it more conspicuous. One requires, however, to see the insect at home, and to know what kind of a stem, branch, etc., it uses to live in. Wheeler (1910, *Ants*: 212) illustrates the culms of a sedge inhabited by *Colobopsis culminicola* Wheeler in Jamaica, which well shows the head of the ant in the entrance-hole in the stem, and the latter when exposed.

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